

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

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IN RE: KEURIG GREEN MOUNTAIN SINGLE-	:	No. 1:14-md-02542 (VSB)
SERVE COFFEE ANTITRUST LITIGATION	:	
	:	<u>Applies to:</u>
	:	<u>No. 14 Civ. 4242</u>
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DECLARATION OF KEVIN M. MURPHY, PH.D.
IN SUPPORT OF DEFENDANT KEURIG GREEN MOUNTAIN'S OPPOSITION
TO JBR'S MOTION FOR A PRELIMINARY INJUNCTION

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I. INTRODUCTION

1. My name is Kevin M. Murphy. I am the George J. Stigler Professor of Economics in the Booth School of Business and the Department of Economics at the University of Chicago, where I have taught since 1983. I have been retained by counsel for Keurig Green Mountain, Inc. (“Keurig”) to serve as an expert in economics in the above-captioned case.

A. Assignment

2. I have been asked by counsel for Keurig Green Mountain, Inc. to examine, from an economic perspective, whether the introduction of the Keurig 2.0 System, both the brewers and K-Cup portion packs (“K-Cups”), is likely to have an anticompetitive effect and cause irreparable harm to JBR. In addition, I have been asked to assess the analysis and opinions set forth in the declaration of JBR’s expert Dr. Gordon Rausser, *Declaration of Gordon Rausser, Ph.D., August 11, 2014* (“Rausser Declaration”).

B. Qualifications

3. I received my bachelor’s degree in economics from the University of California, Los Angeles, in 1981, and I received my doctorate in economics from the University of Chicago in 1986.

4. At the University of Chicago, I am a member of the faculties of both the Booth School of Business and the Department of Economics. I teach graduate level courses in microeconomics, price theory, empirical labor economics, and the economics of public policy issues. In these courses, I cover a wide range of topics, including the incentives that motivate firms and individuals, the operation of markets, and the impacts of regulation and the legal system. Most of my teaching focuses on two things: how to use the tools of economics to understand the

behavior of individuals, firms and markets; and how to apply economic analysis to data. My focus in both research and teaching is on integrating economic principles with empirical analysis.

5. I have authored or co-authored more than 65 articles in a variety of areas in economics. Those articles have been published in leading scholarly and professional journals, including the *American Economic Review*, *Journal of Law and Economics*, and *Journal of Political Economy*. Many of my articles consider economic issues related to industrial organization and antitrust.¹

6. I am a Fellow of the Econometric Society and a member of the American Academy of Arts and Sciences. In 1997, I was awarded the John Bates Clark Medal, which, at the time, was awarded every two years² by the American Economic Association to an outstanding American economist under the age of forty. In 2005, I was named a MacArthur Fellow, an award that provides a five-year fellowship to individuals who show exceptional merit and promise for continued and enhanced creative work.

7. In addition to my position at the University of Chicago, I am also a Senior Consultant at Charles River Associates (“CRA”). CRA is a consulting firm that specializes in the application of economics to law and regulatory matters. I have consulted on a variety of antitrust,

¹ See “Vertical Restraints as Contract Enforcement Mechanisms” (with Benjamin Klein), *Journal of Law and Economics* 31 (October 1988): 265-297; “Vertical Integration as a Self-Enforcing Contractual Arrangement” (with Benjamin Klein), *American Economic Review* 87 (May 1997): 415-420; “A Competitive Perspective on Internet Explorer” (with Steven J. Davis), *American Economic Review* 90 (May 2000): 184-187; “Economic Perspectives on Software Design: PC Operating Systems and Platforms” (with Steven J. Davis and Jack MacCriskin), *Microsoft, Antitrust and the New Economy: Selected Essays* (2002); “The Economics of Copyright ‘Fair Use’ In a Networked World” (with Benjamin Klein and Andres Lerner), *American Economic Review* 92 (May 2002): 205-208; “Entry, Pricing and Product Design in an Initially Monopolized Market” (with Steven J. Davis and Robert H. Topel), *Journal of Political Economy* 112 (Feb. 2004): S188–S225; “Competition in Two-Sided Markets: The Antitrust Economics of Payment Card Interchange Fees” (with Benjamin Klein, Andres V. Lerner and Lacey L. Plache), *Antitrust Law Journal* 73 - 3: 571-626 (2006); “Critical Loss Analysis in the Whole Foods Case” with Robert H. Topel, 3 (2) GCP Magazine (March 2008); “Exclusive Dealing Intensifies Competition for Distribution” (with Benjamin Klein), *Antitrust Law Journal* 75 (Nov. 2008): 433-466; “Competitive Discounts and Antitrust Policy” (with Edward A Snyder and Robert H. Topel), *The Oxford Handbook of International Antitrust Economics*, Volume 2 (2014).

² The award is currently awarded every year. See American Economic Association, “John Bates Clark Medal,” available at http://www.aeaweb.org/honors_awards/clark_medal.php, accessed on 8/21/2014.

intellectual property, and other matters involving industries with economic features similar to those at issue in this case. My curriculum vitae is attached to this report as Appendix A. CRA is paid \$1250/hour for my time spent on this matter, and I receive compensation from CRA based on its billings in this case. My analysis is supported by colleagues at CRA.

C. Summary of Opinions

8. This report sets forth my opinions and describes the data and analyses that underlie my opinions. My opinions are based upon my analysis of documents and data provided by the parties in this matter, through the limited expedited discovery that has been completed, as well as information from public sources. My opinions are also based upon my general expertise in economics. A list of the materials I have relied upon in forming those opinions is attached as Appendix B.

9. My work is ongoing in this matter, and these opinions are based on the information available to me as of the date of this report. To date, I have formed opinions in five broad areas. Below I present a brief description of those areas and the basis for my opinions.

Opinion 1: Keurig does not have monopoly power.

10. Consumers choose the Keurig system based on the price and quality of the system, both the brewers and K-Cups, after comparing the price and quality of alternative systems such as other single-serve systems, multi-serve systems, and even retail outlets. Both qualitative and quantitative evidence indicate that these alternatives constrain Keurig pricing and that Keurig does not have monopoly power. The fact that most of Keurig's growth has occurred because consumers have substituted away from the other alternatives indicates that consumers view these alternatives as reasonable substitutes. In addition, Keurig has designed its products and priced

them to be competitive with these alternatives. Keurig's share of sales among these alternatives is too small to suggest that it has monopoly power. Lastly, empirical evidence indicates that competition from these alternatives has been sufficient to constrain Keurig's system pricing.

11. Keurig began selling the 2.0 system only one week prior to the preliminary injunction hearing. As a result, Keurig 2.0 brewers effectively have a zero percent share of the installed base of single serve brewers. In addition, there is no path dependency, so Keurig's current share of single-serve brewers does not guarantee that the 2.0 system will attain a similar share of brewers. Historical evidence in the form of the introduction of the Keurig Vue brewer confirms that any share of customers that Keurig has for 1.0 brewers will not automatically transfer to the Keurig 2.0 brewer.

Opinion 2: The introduction of the 2.0 system will not exclude JBR from competing during the pendency of the litigation.

12. JBR claims that the ink reading technology, which is part of Keurig's 2.0 system design, will exclude it from competition during the pendency of the litigation. This claim is flawed for several reasons. The demand for JBR's and other 1.0 unlicensed suppliers' portion packs depends on the installed base of brewers for which their packs will continue to work just as they have in the past. Even if JBR and other suppliers cannot sell packs that will work in Keurig 2.0 brewers, because of the ink reading technology, there will be no exclusion of JBR or other 1.0 unlicensed pack suppliers during the pendency of the litigation because the large installed base of existing Keurig 1.0-compatible brewers will fall slowly, if at all, because of a low obsolescence rate for existing 1.0 brewers as well as additional sales of 1.0 brewers by Keurig and other

suppliers. As a result, JBR will experience little change in the number of potential customers during the pendency of this litigation.

13. The evidence also indicates that JBR and other suppliers will, in fact, be able to sell packs that work in Keurig 2.0 systems despite the ink reading technology. Several competitors have already announced that they have developed workarounds to the ink-reading technology and will begin selling packs compatible with the Keurig 2.0 system later this year. [REDACTED]

[REDACTED] This suggests that JBR will be able to sell Keurig 2.0 compatible packs, if it wishes to do so, either by developing its own workaround [REDACTED] so the ink-reading technology will not exclude JBR even under JBR's flawed economic theory.

Opinion 3: The introduction of the Keurig 2.0 system will not be anticompetitive.

14. Even if JBR or other suppliers were not able to reverse-engineer the ink-reading technology, any long-run reduction in the sales of JBR or any other 1.0 compatible portion pack suppliers will not be the result of a reduction in competition. Rather, it will be because of competition between Keurig 2.0 system brewers and sellers of alternative types of brewers, including other sellers of 1.0 compatible brewers. Moreover, even if JBR and other competitors were unsuccessful in the long run, there would be no anticompetitive harm because Keurig would not be able to charge monopoly prices for 2.0 system K-Cups because pricing for K-Cups is constrained by competition from other alternatives.

³ "TreeHouse Foods, Inc. Reports Second Quarter 2014 Results," TreeHouse Press Release, 8/7/2014 (<http://www.newswire.ca/en/story/1401452/realcuptm-brand-capsules-compatible-with-keurig-2-0-brewers>, accessed 8/22/2014).

⁴ Sarina Deposition 8/26/2014, 244:8-246:12.

15. In addition, even if JBR or other suppliers are unable to continue to profitably compete by selling 1.0 compatible packs in the long run, this does not mean that consumers will be worse off. There are also obvious procompetitive effects of the 2.0 system design that will benefit consumers, including adding the ability to brew carafes; raising the overall quality of the system; allowing Keurig to charge lower prices for brewers and raising total system output; and increasing inter-brand competition.

Opinion 4: The introduction of the Keurig 2.0 System will likely not cause JBR to exit the business or suffer unquantifiable damages during the pendency of the litigation, so JBR will not suffer irreparable harm.

16. Any potential harm JBR will suffer due to the introduction of the Keurig 2.0 system will simply be lost profits on lost sales, and standard economic methods are routinely used to calculate such damages. The introduction of Keurig's new 2.0 system will likely have a limited effect on JBR's sales in the near term because the installed base of existing Keurig compatible brewers will fall slowly, if at all. In addition, the success of the 2.0 system is not guaranteed by the success of Keurig's 1.0 systems.

17. The limited impact of the introduction of the 2.0 system on JBR's sales indicates that it is not plausible that JBR will exit the business of selling cups for Keurig's systems during the pendency of this litigation.

Opinion 5: Dr. Rausser's opinions are not based on a standard economic analysis of the evidence.

18. Dr. Rausser's claims about Keurig's alleged monopoly power are based on overly narrow definitions of the relevant markets that are inconsistent with the economic literature on

competition in markets featuring primary products and complementary aftermarket products. Indeed, Dr. Rausser defines the relevant market without conducting any economic analysis of such factors as the willingness of buyers to substitute between the Keurig system and alternatives that are the standard considerations economists address when assessing whether a firm has monopoly power. As a result, his claims are inconsistent with the economic evidence that Keurig's pricing of its K-Cups is constrained by competition from alternatives other than JBR and other unlicensed pack suppliers.

19. Similarly, Dr. Rausser's claims that the challenged contractual provisions will lead to an anticompetitive effect are based largely on the assertion that the type of conduct JBR challenges has been identified by economists as having the potential to exclude competitors. Dr. Rausser, however, conducts no such analysis to establish that the facts in this case indicate anticompetitive exclusion of competitors is likely. Instead, he relies on the affidavits of JBR employees who assert they have lost sales as a result of the conduct. For example, Dr. Rausser makes no attempt to quantify the amount of the putative market affected by the referenced Keurig contractual provisions. His claims are inconsistent with the fact that [REDACTED]

[REDACTED] He also ignores the substantial economic literature demonstrating that such contractual provisions have procompetitive effects because they induce suppliers to compete more aggressively, induce distributors and retailers to provide the efficient level of promotion, or reduce transaction costs. Moreover, even if Dr. Rausser had quantified the level of foreclosure allegedly caused by contracts and demonstrated that JBR was substantially foreclosed by those provisions, which he did not, his discussion of the contracts would still fail to demonstrate competitive harm because

he has not addressed the procompetitive impact of these practices or shown that the challenged conduct causes any anticompetitive harm to consumers.

20. Dr. Rausser's claim that JBR will suffer irreparable harm is unsupported by any economic analysis. For example, Dr. Rausser claims that JBR could be forced to exit the OneCup business, but he conducts no analysis of the likely reduction in JBR's sales or whether it will be profitable for JBR to continue in the OneCup business. He also does no analysis of the likely timeframe across which JBR would be forced out of the OneCup business. Rather, he simply relies on the affidavits of JBR employees for his opinions. In addition, Dr. Rausser alleges that it would be difficult to calculate the damages JBR could suffer, but he provides no explanation or analysis of why standard methods of calculating damages could not be applied in this case.

21. Dr. Rausser's analysis of the balance of hardships from a preliminary injunction is also not based on sound economic reasoning. Dr. Rausser incorrectly claims that the balance of hardships tips in JBR's favor simply because JBR is a smaller company. Economic principles indicate that an appropriate way to assess the balance of hardships is to compare the losses JBR would suffer if a preliminary injunction were not granted to the losses Keurig would suffer if a preliminary injunction were granted. Economic principles also inform us that one should consider whether an individual party would be able to compensate the other for any hardships suffered should the other party prevail after a full trial on the merits. The economic evidence in this case clearly indicates that Keurig's losses would likely be greater. In addition, the relative size of the companies suggests that Keurig would easily be able to compensate JBR for any potential losses if an injunction is denied, whereas the reverse is not true.

II. BACKGROUND

A. Coffee Brewing Systems

1. The Keurig System

22. The first Keurig system was introduced in 1998, and since then, Keurig has become the most popular single-serve hot beverage system in the United States. The first mass-production Keurig brewer was designed for office use and brewed Keurig's K-Cups.⁵ In 2004, Keurig introduced its first brewer sold at retail outlets for home use, which also brewed K-Cups.⁶ These brewers and other versions released later were designed to brew a single serving of coffee or other hot beverage. For the purpose of this report, I refer to the technology behind these brewers as "Version 1.0," or, more simply, "1.0." In 2012, Keurig introduced the "Vue" system that was based on a new technology and is designed to follow more complicated recipes for brewing beverages. The Vue system used another type of cup, the Vue-Cup. The latest technology, "Version 2.0," or, more simply, "2.0," combines the features of the 1.0 and the Vue technologies and also allows the user the option of brewing a single serving of a hot beverage or a full carafe of coffee.⁷

23. Single-serve coffee systems, like Keurig's systems, are composed of two complementary components: brewers and packs containing the coffee. By themselves, the components have little value. In other words, a brewer without packs is not useful, and a pack without a brewer is not useful. The brewers and packs are complements in that increasing the demand for brewers

⁵ <http://www.keurig.com/the-keurig-story>, accessed 8/19/2014. "Keurig At Home: Managing a New Product Launch," Kellogg Business School Case KEL021, February 28, 2005.

⁶ 2004 Keurig Annual Report p. 8 ("The introduction of the new B100 Keurig brewer for the home and small office led to faster growth of K-Cup sales.")

⁷ Keurig also manufactures the Rivo system, which produces espresso, and the Bolt, an "Away From Home" system, which is designed to produce only large carafes of coffee. See <http://www.keurig.com/brewers/rivo-brewing-system>, accessed 8/19/2014 and <http://www.keurig.com/bolt>, accessed 8/19/2014.

raises the demand for packs and vice versa. The brewer is the durable component in the system because brewers typically last for several years. Each user needs only a single brewer.⁸ The packs are the consumable components, and the number of packs purchased varies directly with the number of beverages brewed.⁹

a. Version 1.0 Technology

24. The 1.0 K-cup system is designed to be very easy to use.¹⁰ It reduces the time it takes to brew a hot beverage by simplifying both the preparation and clean up steps. To brew a hot beverage, the user chooses the desired K-Cup, places the K-Cup inside the brewer basket, closes the basket, places a mug or cup under the basket, and chooses a portion size, typically ranging from 6 to 10 ounces.¹¹ The hot beverage is brewed typically in under one minute, and the user cleans up by disposing of the used K-Cup.

25. While the system is designed to be simple to use, the simplicity is the result of a sophisticated design. The Version 1.0 system consists of two parts: a brewing machine or brewer, and disposable “K-Cups.” The Version 1.0 brewer contains a water supply (either a reservoir or a direct connection to a building’s water system), a heater, a pump, a blower, a computer controller, and a basket mechanism designed to hold the K-Cup during the brewing process.¹² A K-Cup is a specially constructed pack that is designed to be airtight, and consists

⁸ Some users, such as large offices, may have multiple brewers.

⁹ Some Vue system beverages require two packs. “Drinking in the Vue, Keurig’s K-Cup Successor,” CNET, April 14, 2012 (<http://www.cnet.com/news/drinking-in-the-vue-keurigs-k-cup-successor/>, accessed 8/25/2014). (“Keurig’s latest take on home coffee brewing supports the creation of frothy cafe beverages, such as lattes and cappuccinos, by using a separate coffee and frother Vue pack for each drink (the packs are partially recyclable).”)

¹⁰ Experience the Keurig K-Cup Brewer Video (<http://www.keurig.com/video-library>, accessed 8/27/2014).

¹¹ Kevin Sullivan Deposition 8/7/2014, 54:3-8; 65:19-22. See also <http://www.keurig.com/brewers/elite-brewing-system>, accessed 8/27/2014.

¹² Sullivan Deposition 8/7/2014, 300:18-301:5. See also, for example, Keurig K-Cup K40/K45 Elite Brewer Owner's Manual

of a plastic cup and a specially designed foil lid.¹³ Inside the pack is a beverage base (e.g., coffee or tea) and typically a filter.¹⁴

26. During the brewing process, the K-Cup is punctured in two places: on top, which allows hot water to enter, and on the bottom, which allows the brewed coffee to exit.¹⁵ Hot water enters the K-Cup through the top opening under low pressure and flows into the beverage base.¹⁶ The hot water and the beverage base combine to make the desired beverage, which then flows through a filter, and then into the user's mug.¹⁷ At the end of the brewing cycle, a blower forces most of the remaining moisture out of the K-Cup. The Version 1.0 system has become extremely successful for Keurig [REDACTED]

27. When Keurig introduced its Version 1.0 system it restricted the ability of third-party sellers to make compatible packs.¹⁸ As the system grew in popularity, it became an attractive target for unlicensed competitors. After Keurig's patents expired in 2012, the Keurig 1.0 system became open in that any roaster could sell packs that would work with Keurig 1.0 brewers.¹⁹

(<http://www.Keurig.com/~media/Files/Keurig%20Brewer%20Manuals/2013%20Use%20and%20Care%20Guides/Elite%20Use%20%20Care%20Guide.ashx>, accessed 8/27/2014).

¹³ Sullivan Deposition 8/7/2014, 52:8-21.

¹⁴ Experience the Keurig K-Cup Brewer Video (<http://www.Keurig.com/video-library>, accessed 8/27/2014).

¹⁵ Sullivan Deposition 8/7/2014, 295:17-296:19. See also, for example, Keurig K-Cup K40/K45 Elite Brewer Owner's Manual

(<http://www.Keurig.com/~media/Files/Keurig%20Brewer%20Manuals/2013%20Use%20and%20Care%20Guides/Elite%20Use%20%20Care%20Guide.ashx>, accessed 8/27/2014).

¹⁶ Sullivan Deposition 8/7/2014, 190:22-25. See also Experience the Keurig K-Cup Brewer Video (<http://www.Keurig.com/video-library>, accessed 8/27/2014).

¹⁷ Experience the Keurig K-Cup Brewer Video (<http://www.Keurig.com/video-library>, accessed 8/27/2014).

¹⁸ "The K-Cup Patent Is Dead, Long Live The K-Cup," Wall Street Journal, 11/28/2012

(<http://blogs.wsj.com/corporate-intelligence/2012/11/28/the-k-cup-patent-is-dead-long-live-the-k-cup/>, accessed 3/14/2014) ("With those patents expiring this September, a big part of that lucrative arrangement comes to an end. Other companies can now produce their own versions of the so-called K-cup, and advertise them as being compatible with Keurig machines.").

¹⁹ For example, see http://www.kraftrecipes.com/products/maxwell_house_pods.aspx, accessed 8/20/2014, <http://www.gevalia.com/forKeurig-coffee/forKeurig-coffee.default.sc.html>, accessed 8/20/2014.

According to one estimate, unlicensed packs for the 1.0 system represent around 14% of compatible packs for 1.0 brewers, and there are also many licensed third-party brands.²⁰

b. Vue

28. Keurig released the Vue system in 2012.²¹ The Vue system is designed to give the user greater ability to customize the brewing process by allowing for more flexibility in drink size, water pressure, temperature and airflow. For example, the Vue system can create “café beverages” such as lattes, café mochas, and cappuccinos.²²

29. The Vue system differs from the Version 1.0 system in both the packs and the brewers.²³ The Vue system brewer pierces two holes in a Vue Pack,²⁴ however, unlike a K-Cup, the Vue Pack’s holes are both in the top of the pack.²⁵ A Vue Pack is shaped differently than a K-Cup, and will not fit into a Version 1.0 brewer.²⁶

30. Vue system brewers are more complicated than Version 1.0 brewers.²⁷ Because the Vue system is designed to brew more than a single type of beverage,²⁸ it allows for the use of

²⁰ “Green Mountain Coffee Roasters’ CEO Discusses F1Q 2014 Results,” GMCR Earnings Call Transcript, 2/5/2014 (“[W]e estimate that unlicensed packs represented a 14% share of the Keurig system as of the end of our first quarter.”).

²¹ “Green Mountain Coffee Roasters Unveils New Keurig Brewing Platform,” GMCR Press Release, 2/15/2012. See also Experience the Keurig Vue Brewer Video (<http://www.keurig.com/video-library>, accessed 8/27/2014).

²² <http://www.keurig.com/shop/vue-packs/v-pack-all-varieties>, accessed 8/27/2014.

²³ Sullivan Deposition 8/7/2014, 67:24-68:16. See also Experience the Keurig Vue Brewer Video (<http://www.keurig.com/video-library>, accessed 8/27/2014).

²⁴ Sullivan Deposition 8/7/2014, 298:7-16. See also Experience the Keurig Vue Brewer Video (<http://www.keurig.com/video-library>, accessed 8/27/2014).

²⁵ Sullivan Deposition 8/7/2014, 295:22-296:8. See also Experience the Keurig Vue Brewer Video (<http://www.keurig.com/video-library>, accessed 8/27/2014).

²⁶ Sullivan Deposition 8/7/2014, 55:21-56:15. See also How to Brew Keurig Vue Beverages Video (<http://www.keurig.com/video-library>, accessed 8/27/2014).

²⁷ Sullivan Deposition 8/7/2014, 192:3-15. See also How to Brew Keurig Vue Beverages Video (<http://www.keurig.com/video-library>, accessed 8/27/2014).

²⁸ Sullivan Deposition 8/7/2014, 298:7-299:12.

“recipes,” which may be customized for each product being brewed.²⁹ Vue system brewers include a piston pump that allows the brewer to make stronger and larger coffee than the 1.0 brewers.³⁰ For example, the Vue system allows the user to brew a full-sized travel mug of coffee: this option requires the Vue system to be able to adjust the quantity of water used in a recipe beyond the range designed for a 1.0 brewer and K-Cup.³¹

31. In addition, café beverages can be made using two separate Vue Packs: one is used to create the “frothy” component of the beverage, while the other is used to create the coffee base. The Vue Brewer must be able to follow a two-stage recipe that first calls for a set of steps to create the froth, using water and air pressure, and then a specific amount of water at a specific temperature to create the coffee portion of the drink.

32. Despite the flexibility of the Vue system, it has not generated a large amount of sales relative to the Version 1.0 system [REDACTED]

c. 2.0

33. In August 2014, Keurig introduced a new brewing system, which it has called “2.0.” The 2.0 system is designed to offer users the flexibility of easily brewing either a single serving of a hot beverage, more customized beverages like those for the Vue system, or a full four cup carafe of coffee.³³ The 2.0 system provides this combined functionality in a single brewer with portion

²⁹ Sullivan Deposition 8/7/2014, 192:3-15. See also How to Brew Keurig Vue Beverages Video (<http://www.keurig.com/video-library>, accessed 8/27/2014).

³⁰ Sullivan Deposition 8/7/2014, 264:14-15.

³¹ “Stronger, Bigger, Hotter: Keurig Vue Technology,” Keurig website, (<http://www.keuriggreenmountain.com/en/OurStories/Unindexed/InnovationVueBrewer.aspx>, accessed 8/25/2014). See also Manly Deposition 8/8/2014, 81:1-3.

³² Manly Deposition 8/8/2014, 78:13-17; 79:18-80:2.

³³ Gasparro, Annie, “New Coffee Brewer Tests Keurig CEO’s Recipe,” The Wall Street Journal, 8/21/2014.

packs that can also be used in the millions of Keurig 1.0 and Vue brewers already in the hands of consumers.

34. Unlike previous Keurig systems, which used a single pack format, the Version 2.0 system is designed to work with multiple formats, including a pack that shares the same physical dimensions of the Version 1.0 K-Cup (which I call a Version 2.0 K-Cup), a pack that shares the same physical dimensions of the small Vue Pack for brewing more complicated single-serving beverages (Version 2.0 Vue Pack), and two additional sizes, a medium size and a new larger “Carafe Cup,” also using the Vue format, for brewing a travel mug or full carafe of coffee.³⁴

35. Keurig has designed technology that allows a variety of recipes to customize beverages, while simplifying the brewing process for the user by allowing the Version 2.0 brewer to recognize the type of portion pack that has been inserted into the brewer: Version 2.0 K-Cup or Version 2.0 Vue Pack.

[REDACTED]

³⁴ Gasparro, Annie. “New Coffee Brewer Tests Keurig CEO’s Recipe,” The Wall Street Journal, 8/21/2014.

³⁵ Sullivan Deposition 8/7/2014, 36:12-37:19; 119:7-120:15.

[REDACTED]

[REDACTED]

37. Keurig designed the Version 2.0 system to be closed so that unlicensed packs would not work with Version 2.0 brewers. Whether 2.0 will remain a closed system, however, depends on whether unlicensed pack makers will be able to reverse-engineer the ink technology and manufacture portion packs that will work in the 2.0 brewer. TreeHouse and Mother Parkers claim they already have workarounds in place and will be able to offer 2.0-compatible packs shortly after the brewer's launch.³⁷

38. Version 2.0 K-Cups are backward compatible with Version 1.0 brewers.³⁸ That means that users of Version 1.0 brewers can use Version 2.0 K-Cups. Version 1.0 brewer owners will also be able to continue to use Version 1.0 packs (licensed or unlicensed) for as long as they continue to use a Version 1.0 brewer (their current machine or any replacement 1.0 brewer they might purchase in the future from Keurig or a third party manufacturer). Because there is no

³⁶ Manly Deposition 8/8/2014, 79:18-80:2; Sullivan Deposition 8/7/2014, 192: 6-15.

³⁷ "TreeHouse Foods Inc. Reports Second Quarter 2014 Results," TreeHouse Press Release, 8/7/2014, (<http://phx.corporate-ir.net/phoenix.zhtml?c=191105&p=irol-newsArticle&ID=1956509&highlight=>, accessed 8/7/2014), ("We are particularly pleased to announce that we have successfully developed new single serve coffee products that will work in both existing and next generation coffee makers manufactured by the leading supplier of personal at-home brewing systems in the United States. . . we expect to begin shipping in the fourth quarter of this year."); "RealCup Brand Capsules Compatible with Keurig 2.0 Brewers," Newswire, 8/21/14, (<http://www.newswire.ca/en/story/1401452/realcuptm-brand-capsules-compatible-with-keurig-2-0-brewers>, accessed 8/26/14).

³⁸ Sullivan Deposition 8/7/2014, 296:20-297:9. See also KGM00000191. Version 2.0 Vue Cups are also backward compatible with Vue brewers.

difference between a Version 1.0 K-Cup and a Version 2.0 K-Cup for the owner of a 1.0 brewer, the introduction of Version 2.0 K-Cups does not reduce the options available to present or future users of Version 1.0 compatible brewers.

d. System Costs

39. The total consumer cost of a brewing system consists of the price of the brewer and the amount spent on coffee over the life of a brewer. Keurig Version 1.0 at-home brewers range from between \$100 and \$190.³⁹ Keurig 2.0 brewer suggested retail prices range from \$150 to \$200, although the entry level 2.0 model is currently available starting at \$119.⁴⁰ The amount spent on coffee depends on the number of packs brewed and the price of the packs. For example, the average price per K-Cup for Green Mountain brand coffee for 2014 (through July 6, 2014) was \$0.60.⁴¹ [REDACTED]

[REDACTED]

[REDACTED]

2. Alternatives to the Keurig System

40. There are many alternatives to Keurig systems for producing single servings of coffee, including traditional brewing methods for single and multiple servings of coffee, other single-serve systems, and retail outlets.

³⁹ <http://www.keurig.com/shop/brewers/all-brewers>, accessed 8/21/2014.

⁴⁰ <http://www.target.com/p/keurig-2-0-k300-coffee-maker-brewing-system-with-carafe/-/A-15351559>, accessed 8/29/2014.

⁴¹ Keurig Green Mountain Pack Pricing Trends, IRI Total US-Food.

⁴² KGM00000528.

a. Traditional Methods

41. Traditionally the most popular way to prepare coffee at home or at work has been to use a multi-serve system such as a drip coffee maker or percolator. These systems brew an entire carafe of coffee instead of just a single cup. These systems have traditionally been open systems, with users able to mix and match the brewer, the filter medium, and the coffee.

42. There are also alternative ways to prepare single cups of coffee at home that compete with Keurig. Examples include instant coffee, French presses and Melitta cup-top brewers. These systems have also effectively been open in that users are able to mix and match the brewer and the coffee (and, in the case of the Melitta cup-top brewers, the filter).

b. Modern Single-Serve Systems

43. There are at least four single-serve systems other than Keurig-licensed 1.0-compatible systems available in the U.S. today, plus numerous licensed and unlicensed compatible systems. Exhibit 2 contains details on these four alternative single-serve systems.

44. Like the Keurig systems, other single-serve systems all feature a durable brewer and packs that are inserted into the brewer. In addition, these systems are all designed to be closed in that they limit the ability of third-party packs to be used with the brewers.⁴³

45. There are also several different non-Keurig Version 1.0 compatible brewers for sale by manufacturers such as Conair (Cuisinart brand) and Jarden Consumer Solutions (Mr. Coffee brand).⁴⁴ These brewers, which are licensed by Keurig, are fully compatible with 1.0 K-Cups,

⁴³ "The Global Coffee Industry, Growth (Still) Brewing," Gabelli & Company, May 9, 2013. See also "Nespresso VertuoLine My Machine," Nespresso (http://www.nespresso.com/ecom/medias/sys_master/public/9301504983070.pdf, accessed 8/27/2014).

⁴⁴ Keurig 2013 10-K, p. 2. See also "Cuisinart SS-700," Bootic.com, accessed 8/26/14, and "Mr. Coffee Bvmc-kg2," BuyStuff.com, accessed 8/26/14.

unlicensed packs, and 2.0 K-Cups. Some also cost less than Keurig brewers.⁴⁵ Unlicensed manufacturers, such as Hamilton Beach and Remington, also manufacture brewers that are compatible with 1.0 K-Cups, unlicensed 1.0-compatible portion packs, and 2.0 K-Cups. Exhibit 3 contains details on these brewers.

c. Retail Options

46. In addition to brewing hot beverages at home or work, consumers can also purchase hot beverages at retail outlets such as coffee shops, fast-food restaurants, and doughnut shops.

Starbucks is the largest retail coffee chain in the U.S. with sales of \$13.15 billion at its stores.⁴⁶

Other chains, such as Dunkin' Donuts, Peet's and independent coffee shops also sell large volumes of coffee to consumers.⁴⁷

47. Exhibit 4 shows the distribution of coffee consumption by these alternatives. Coffee consumption for Keurig brewers represents a small share of total coffee consumption. In 2013, 58% of coffee drinkers consumed drip coffee and 20% of coffee drinkers consumed single-serve coffee.⁴⁸

⁴⁵ "Coffee in a Hurry," Consumer Reports, September 2014. "Who Knew a Hunk of Steel Could be so Flexible," CNET, 3/7/2014 (<http://www.cnet.com/products/bunn-mycafe-mcu/>, accessed 8/26/2014).

⁴⁶ Starbucks 2013 Annual Report.

⁴⁷ Both Caribou and Peet's were sold to Joh. A. Benckiser in 2012. See "What the New Owner of Peet's and Caribou Will Do Next," Forbes, 12/18/2012. In 2012, Caribou reported \$242.3 million in coffeehouse sales and Peet's reported \$214.3 million in retail store sales. See Caribou 2012 Annual Report and Peet's 2012 Annual Report. Indeed, even fast food restaurants such as McDonald's now emphasize their coffee drinks. See "McDonald's Seeks to Out-Latte Starbucks Amid Coffee Wars: Retail," Bloomberg, 1/29/2014 (<http://www.businessweek.com/news/2014-01-29/mcdonald-s-seeks-to-out-latte-starbucks-amid-coffee-wars-retail>, accessed 8/27/2014).

⁴⁸ National Coffee Drinking Trends, The NCA Market Research Series, 2014.

B. JBR

48. JBR has been a coffee roaster since 1979.⁴⁹ Prior to introducing single-serve portion packs,⁵⁰ JBR's efforts were focused primarily on growing coffee and selling whole bean and ground coffee. [REDACTED]

49. JBR began producing Version 1.0 compatible packs in 2011 under the brand name OneCup.⁵² JBR's OneCup has a mesh pack suspended from a top ring, but no cup. JBR markets its OneCups as environmentally friendly and claims they are 97 percent biodegradable.⁵³

50. [REDACTED]
[REDACTED]

C. Economics of Competition among Systems

51. To assess JBR's and Dr. Rausser's claims, it is important to understand the economic features of markets featuring system level competition. System level competition often involves a durable primary product and complementary aftermarket components. When consumers make decisions among alternative systems, they base their choices on price and quality of both the primary and aftermarket products. Thus, suppliers of systems compete by choosing the prices and quality of the primary and aftermarket components that best meet the needs of consumers.

⁴⁹ Rogers Declaration 8/11/2014, at ¶ 2,

⁵⁰ Rogers Declaration 8/11/2014, at ¶ 12.

⁵¹ JBRI00000036.

⁵² Rogers Declaration 8/11/2014, at ¶ 23.

⁵³ "Rogers Family Launches OneCup BIO," Rogers Press Release, 10/10/2013 (<http://www.rogersfamilyco.com/index.php/bio-degradable-onecup-press-release/>, accessed 8/27/2014). "The Mystery of the Bio_degradable OneCup Revealed," Rogers Press Release, 10/23/2013 (<http://www.rogersfamilyco.com/index.php/mystery-bio-degradable-onecup-revealed/>, accessed 8/27/2014).

⁵⁴ See JBRI00000036 ; Rausser Declaration 4/15/2014, at ¶ 16

52. Designers of primary products can choose to make their systems open or closed. If open, then any third-party suppliers can sell complementary aftermarket components, and if closed, then aftermarket products can only be sold by either the supplier of the primary product or those third parties that the supplier authorizes.⁵⁵ When competition occurs at the system level, pricing for complementary components is constrained by system level competition. In addition, where the maker of a closed system licenses others to make complementary products, prices can be constrained by competition from these licensees. System level competitors have an incentive to choose the degree of openness of a system that best meets the needs of consumers.

53. System level competition often has a dynamic component to it in that suppliers innovate by developing new systems. This dynamic competition can sometimes exhibit what economists refer to as path dependence. Path dependence occurs when the success of the next generation of a producer's product is determined by the success of the current generation of a producer's product. One factor affecting whether there is path dependence is the extent to which new systems are designed to be compatible with older systems. Because 2.0 K-Cups are designed to be compatible with 1.0 brewers, path dependence is less likely in this case.

1. System Level Competition and Pricing with Complementary Components

54. Systems based on a durable primary component and complementary aftermarket components are commonplace. For example, shaving systems require both a razor and blades to be useful. Video game systems require both the console and a video game disc or cartridge to be useful. Electric toothbrushes require both the handle and the disposable brushes. Economists that have studied markets featuring systems have often referred to the durable products like

⁵⁵ Suppliers can also have a partially closed system in which it restricts use of some, but not all, categories of third-party aftermarket products.

single-server brewers, razor handles, video game consoles, and toothbrush handles as primary products and the complementary K-Cups, blades, video games, and toothbrush heads as aftermarket products in that they continue to be purchased after the primary product has been purchased. The primary and aftermarket products are not valuable without each other, so demand for a system is a function of the price and quality of the entire system including both the primary and aftermarket products. The value of the entire system also depends, in part, on how well the components work together.

55. The complementarity between the primary and aftermarket products has two important implications: 1) the profit maximizing prices for the primary and aftermarket products are not independent of one another; and 2) pricing for aftermarket products is constrained by system level competition.

a. The Pricing of Primary and Aftermarket Products Are Not Independent

56. When a system supplier chooses the price for primary products, it takes into consideration the effect of that price on profits it can earn selling aftermarket products. Lower primary product prices increase the number of consumers who purchase the primary product and raise the profits it can earn selling aftermarket products. Similarly, low aftermarket prices stimulate demand for primary products raising their profit maximizing price. One factor affecting a supplier's pricing strategy is the degree of experience consumers have with the system. If there are a large number of consumers that have not previously used the system, suppliers will have a greater incentive to choose a low price for the primary products to encourage experimentation with the system by new users. This expands the total installed base of primary products and allows suppliers to earn higher profits on sales of the complementary components.

57. It is common in competitive industries featuring a primary product and complementary aftermarket products for sellers to charge relatively low prices (as a share of total system price) for the primary product and relatively higher prices for the aftermarket products. For example, razor handle prices are relatively low, while razor blade cartridge prices are relatively high. One advantage of this pricing for sellers is that it allows them to sell to infrequent users with elastic demand that would not otherwise purchase the system. Infrequent users pay a lower total price with a low handle price and high cartridge price than they would with a higher handle price and lower cartridge price. It also allows sellers to charge a higher total price for more frequent users who have more inelastic demand than the sellers would earn if they sold the handles at a higher price and cartridges at a lower price. Economists refer to this as metering of demand.

58. If we observe all system level competitors in an industry adopting metering strategies, then economics suggests that this pricing strategy best meets consumers' needs. If not, then a competitor that charged high prices for primary products and low prices for aftermarket products would be able to capture a large share of total system sales which could induce other suppliers to change their strategies.

b. System Level Competition Constrains Pricing of Aftermarket Products

59. Because consumers choose systems based on the price and quality of both primary and aftermarket products, competition at the system level will, under most conditions, prevent a supplier from charging monopoly prices for its aftermarket products even if it is the only supplier of aftermarket products.

60. The complementarity between primary and aftermarket products indicates that pricing of aftermarket products is constrained by competition at the primary product level. The ability to

charge monopoly prices depends on whether the supplier has monopoly power at the time buyers commit to buying into the system and not when they purchase aftermarket products.⁵⁶ If a primary market is competitive, then high prices of aftermarket products will induce consumers to substitute to another supplier's system. Thus, competition at the level of the system constrains the ability of a system supplier to charge monopoly prices for complementary products even if it supplies all, or nearly all, of the complementary products. This also means that a system supplier's share of sales in the aftermarket is not a meaningful indicator of its monopoly power.

61. Economists have identified conditions under which a seller of aftermarket products may be able to charge supra-competitive prices even if there is competition at the system level.⁵⁷ Even if consumers must make a large up-front investment in a primary product and if certain other conditions are met, then a seller of primary products that originally offers complementary aftermarket products at competitive prices still would not have an incentive and ability to exploit the fact that buyers are locked into its system and raise aftermarket prices to supra-competitive levels unless certain additional conditions are met. In particular, harm would not arise if consumers have information about pricing up front. Alternatively, if consumers are uninformed about the prices of aftermarket products and lack the ability to switch systems later if they become informed, then sellers may have an incentive and ability to charge monopoly prices for those aftermarket products. Below I discuss how none of the multiple conditions needed for harm to arise is satisfied in this case.

⁵⁶ See, for example, Klein, Benjamin. "Market Power in Antitrust: Economic Analysis After Kodak," *Supreme Court Economic Review* 3 (1993) pp. 43–92.

⁵⁷ MacKie-Mason, Jeffrey K., and John Metzler, "Links Between Markets and Aftermarkets: Kodak (1997)," *The Antitrust Revolution: Economics Competition and Policy, Fifth Edition* (2009), pp. 566-567.

2. Open and Closed Systems

62. A system based on a primary product and complementary aftermarket products can be either open or closed. In an open system, the primary product can work with any supplier's aftermarket products. For example, drip coffee systems, which consist of a drip brewer, a coffee filter, and ground coffee, are typically open systems. The user can purchase filters from a different supplier than the brewer and can choose ground coffees from many different roasters.

63. A closed system, however, limits the complementary products that are compatible with the primary product through intellectual property or other licensing restrictions. Single-serve coffee systems are often closed systems: the supplier of the brewer may be the sole supplier of compatible packs, or may require others to take a license in order to supply. The iPhone is designed to be a partially closed system: developers who wish to sell applications for the iPhone can do so, but they must gain approval from Apple to be included in the App Store.

64. It is important to realize that closing a system does not eliminate competition. In fact, closing a system can actually increase competition. System suppliers that choose to close their systems must compete with other closed or open systems. While the seller of the primary products necessarily has a 100 percent share of aftermarket sales in a completely closed system, designing a closed system does not mean that a system level competitor can charge monopoly prices for aftermarket products when, as discussed above, there is competition at the system level. Closing a system can also increase inter-brand competition by allowing system level competitors to better differentiate their products.

65. Economists have identified several procompetitive reasons why suppliers would want to design closed systems.⁵⁸ With a closed system, the owner of the primary technology can have better control over the quality of complementary products. Because the overall demand for a system depends on how well the complementary parts of the system work together, the owner of the closed system can internalize the benefits that accrue from providing both a high-quality primary product and high-quality aftermarket products. This can be important because an improvement in the quality of one component raises demand for both components. For example, better quality packs increase the demand for packs *and* increase the demand for brewers. In an open system, the demand for the primary product can be negatively affected by poor quality of any third-party seller of complementary aftermarket products.

66. Moreover, a closed system mitigates the possibility of what is called the “shared blame” problem.⁵⁹ The shared blame problem occurs when the user of a system uses a low quality aftermarket product but cannot easily determine whether the source of the problem is the primary or aftermarket product. When this occurs, the user assigns part of the blame to the primary product which reduces the user’s perception of the system quality. The reduction in system quality perception harms the producer of the primary product as well as other suppliers of aftermarket products. By closing the system, the supplier can control the quality of complementary aftermarket products and eliminate the shared blame problem.

⁵⁸ See, for example, Klein, Benjamin. “Market Power in Antitrust: Economic Analysis After Kodak,” *Supreme Court Economic Review* 3 (1993) pp. 43–92.

⁵⁹ Borenstein, Severin, Jeffrey Mackie-Mason, and Janet Netz. “Exercising Market Power in Proprietary Aftermarkets,” *Journal of Economics and Management Strategy* 9 p. 185.

67. In addition, closed systems allow system owners to better meter demand.⁶⁰ Buyers of systems will typically differ in their use of aftermarket products. High-demand users will buy relatively more aftermarket products than low-demand users. As discussed above, in order to attract both high- and low-demand users to the system, a supplier of systems may want to set the price of the primary product relatively low (to compete to attract consumers to try the system) and set the price of the complementary products relatively high. Thus, a closed system makes metering of demand more feasible because it allows a seller to earn higher profits on aftermarket products, and it induces the seller to charge lower prices for primary products. This can increase total system level output because it induces low-use buyers to purchase the primary product when they might not have done so had the system been open and the supplier charged a higher price for the primary product. Moreover, if a closed system increases output, it can benefit all consumers by increasing the returns to investment in R&D and leading to greater innovation.

68. Whether it is profit maximizing for a firm to design its system to be open or closed depends on the relevant system product and consumer preferences. Since system suppliers can choose either an open or closed design, we would expect, as a matter of economics, that existing system designs better meet the needs of consumers in a particular industry than the alternative. In other words, if we observe system level suppliers competing entirely or predominantly using closed systems, it is likely that closed systems benefit customers. Conversely, if consumers prefer open systems in a particular context, then suppliers using open systems would capture the majority of sales. Moreover, where multiple firms in an industry use closed systems, if one individual closed system competitor were compelled to open its systems, its ability to compete would be reduced and consumers would be worse off.

⁶⁰ See, for example, Klein, Benjamin. "Market Power in Antitrust: Economic Analysis After Kodak," *Supreme Court Economic Review* 3 (1993) pp. 43–92.

3. System Competition and the Role of Path Dependence

69. In industries featuring dynamic competition among systems, firms innovate by developing new systems of products that they hope will induce consumers to upgrade from their prior systems and will induce consumers to substitute from competitors' systems. In most cases, suppliers' new systems are successful when they are better at satisfying consumer demand than its prior systems and better at doing so than competitors' systems.

70. In some limited circumstances, systems exhibit what economists refer to as path dependence in that future success of new systems is determined by the success of a prior system or systems.⁶¹ Path dependence can exist when consumers make significant investments in a particular system that can be lost if they switch to a competitor's system. Because of this investment, when a new version of the system is introduced, consumers may adopt that technology even if there are better alternatives available, rather than forego the benefits tied to their existing investment. Path dependence can also be present when systems exhibit strong network effects in that the value of a particular system depends on the number of other consumers using that system. In such a case, consumers may have an incentive to adopt a new version of a popular system simply because the prior version was popular and not because the new version is better than the prior one or better than alternatives.

71. One of the factors that limits any potential path dependency is backward compatibility of the new technology. If complementary products for a new version of a system work on older generations of the system, then the systems are less likely to exhibit path dependence—that is, there is less pressure on users of the old generations to upgrade, because the latest

⁶¹ Liebowitz, S. J, and Stephen E. Margolis. "Path Dependence, Lock-In, and History." *Journal of Law, Economics, and Organization* (1995).

complementary products continue to be available to them. Path dependence is also particularly unlikely to arise where older versions of the primary component of the system continue to be sold after the new one is introduced. Where both of these conditions are present, consumers can continue to use the older generation system and still benefit from existing investments.⁶²

72. An example of a system exhibiting path dependence was the Apple iPod. Reviewers frequently touted the advantages of competitor MP3 players relative to the iPod, but when iPod owners purchased new MP3 players they overwhelmingly chose new versions of the iPod because they did not want to give up or have to convert their iTunes music libraries, which can include thousands of tunes.⁶³

73. Below I discuss in more detail why path dependence will not play a role in any success of the 2.0 system.

III. KEURIG DOES NOT HAVE MONOPOLY POWER

74. As discussed above, economic principles indicate that system level competition, under most circumstances, constrains the pricing of aftermarket products. Applying these principles to this case means that Keurig would be unable to charge monopoly prices for K-Cups unless Keurig has monopoly power at the system level. Both the qualitative and quantitative evidence indicate that Keurig competes against other systems and does not have monopoly power. In addition, even if, contrary to the evidence, Keurig did have monopoly power based on the 1.0 system, the Keurig 2.0 brewer effectively has no share of the single-serve brewer installed base

⁶² Under these circumstances users of the older generation system will also continue to benefit from any potential network effects if the industry is one in which there is value to using the same system that is used by a large number of other consumers.

⁶³ “Tuning In a Zippier Zune” New York Times, 9/17/2009. See also <http://www.cnet.com/products/zune-hd/>, accessed 8/26/2014.

when it is introduced, and, because there is no path dependence, Keurig will not have monopoly power in the 2.0 system based on the success of the 1.0 system.

A. Keurig Competes Against Other Systems

75. Keurig competes not only against other single-serve systems, but also against the much larger segment of multi-serve systems, retail outlets, and traditional single-serve techniques.

76. Keurig's 1.0 system was introduced as a closed system at a time when nearly all coffee was brewed using multi-serve systems and modern single-serve systems were in their infancy. As shown in Exhibit 4, growth in modern single-serve usage has come largely at the expense of traditional multi-serve systems. This means that buyers of Keurig systems have found single-serve systems to be reasonable substitutes for their prior multi-serve systems. [REDACTED]

[REDACTED]

[REDACTED].⁶⁴ Economic principles indicate that because a large share of buyers views alternative systems as reasonable substitutes for Keurig's systems, Keurig does not have monopoly power.

77. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁶⁴ KGM00006057.

[REDACTED]

[REDACTED]

78. Economists and courts have often used a supplier's share of sales as a possible indication that the supplier may have monopoly power. Keurig's share of sales including both multi-serve systems and retail sales was only 15 percent in 2013.⁶⁷ This is too small a share to suggest that Keurig has monopoly power.

79. Economists and courts also often look at the absence or presence of entry barriers to assess whether suppliers have monopoly power. Here, there are no barriers to entry by competitive alternatives. For example, Nespresso introduced its VertuoLine of brewers, which makes both coffee and espresso,⁶⁸ and there are several new 1.0 compatible brewers coming on the market.⁶⁹ Since the price of Keurig's brewers is very low as a percentage of the total system costs, the costs of switching to alternative systems is low. Accordingly, if Keurig were to raise its price to a monopoly level, we would expect consumers to switch to other alternatives.

80. Moreover, economic evidence indicates that Keurig does not have power to raise system prices to monopoly levels. A natural way to empirically test whether Keurig has monopoly power in systems is to examine the impact of entry of unlicensed 1.0-compatible portion pack suppliers on prices of Keurig K-Cups. If Keurig had monopoly power in systems, then the absence of other sellers of K-Cups would allow it to charge monopoly prices in K-Cups. If this were the case, then entry by JBR and other unlicensed pack makers should have forced Keurig to

⁶⁷ Keurig's sales were \$4.3 billion in 2013 (\$3.7 billion in the United States), see Keurig 2013 10-K. The entire coffee market sales were \$27.9 billion, see "The Retail Market for Coffee in the US," IBISWorld, May 2013.

⁶⁸ "New Nespresso system aims to reshape North American coffee industry," Nestle, 2/19/2014 (<http://www.nestle.com/media/newsandfeatures/nespresso-us-launch>, accessed 8/25/2014). ("The new VertuoLine system, the result of almost a decade of research, has been designed to meet the tastes and preferences of the North American consumer, creating an American-style large-cup coffee as well as the authentic European espressos for which the brand is famous.")

[REDACTED]

charge lower prices. If, on the other hand, system level competition was already constraining K-Cup pricing before the entry, then the entry would not have forced Keurig to reduce its prices.

81. Exhibit 5A contains the yearly average prices of K-Cups for 2009 to 2014. JBR began selling OneCups in October 2011, and Keurig's patents expired in 2012. Thus, if Keurig had monopoly power, we would expect that they would have higher prices in 2009 through 2011 than from 2012 through 2014. Since supply and demand factors other than entry of unlicensed pack sellers may have influenced prices, it is appropriate to control for other factors by using a difference-in-differences approach. This method compares the difference in K-Cup prices relative to the prices of other products that would be impacted by these factors but would not be impacted by the entry of 1.0 compatible competitor portion packs. Exhibit 5A contains yearly per serving prices for ground coffee, which should be affected by many of the same supply and demand factors but not by the entry of JBR and others. The results indicate that the yearly differences between K-Cup prices and coffee prices are actually larger (that is, K-Cup prices are relatively higher) post entry of unlicensed competition than pre entry, so there is no evidence that the entry caused Keurig to lower its prices. Exhibit 5B compares the average prices of the pre entry and post entry periods. [REDACTED]

B. Keurig 2.0 in Particular Has No Monopoly Power and there is No Path Dependence

82. Keurig's share of single-serve brewer sales is not an indication that it has monopoly power because, as discussed above, Keurig competes against alternatives other than single-serve

systems. However, even if a high share of single-serve brewer sales were an indication that Keurig had monopoly power, Keurig cannot have monopoly power in 2.0 brewers because it currently has essentially a zero percent share of the installed base of single-serve brewers as 2.0 just went on sale. Moreover, there is no path dependency in this case, so any high share for 1.0 would not mean that the 2.0 system will have monopoly power. As discussed above, 2.0 K-Cups are backwards compatible, which means that owners of Version 1.0 brewers will not be forced to upgrade their brewers in order to use Version 2.0 K-Cups. In fact, the large installed base of durable Keurig 1.0 brewers itself acts as a constraint on Keurig's ability to induce consumers to buy the 2.0 brewer. Consumers will also continue to have the same alternatives to Keurig systems that they currently have. These options include: 1) some versions of the 1.0 Keurig brewers, including one of its most popular models; 2) non-Keurig 1.0 compatible brewers; 3) other single-serve brewers; 4) multi-serve brewers such as drip systems; and 5) retail outlets that brew coffee for consumers. The competition from these other alternatives will not change with the introduction of the 2.0 system. The fact that 2.0 systems will be competing with 1.0 systems and other alternatives greatly minimizes the possibility of any path dependency.

83. Also, if a current 1.0 brewer owner wants to replace her brewer, alternative system suppliers will be able to compete for that customer because the fact that the customer owns a 1.0 brewer does not give Keurig an advantage in competing for that customer. Consumers do not have to make large specific investments in Keurig technology that they will lose when switching to an alternative system. Accordingly, when the former 1.0 owner looks to buy a new machine, Keurig does not have an advantage competing for that sale based on the fact that she owns a Keurig system. In short, the success of the Keurig 2.0 system is not guaranteed by the success of

the 1.0 system. If the 2.0 system is in fact successful it will be because consumers find it a more attractive alternative to the 1.0 system and other alternatives.

84. The possibility of network effects resulting from the availability of brands through the Keurig system does not disadvantage JBR. It in fact benefits JBR and other unlicensed portion pack suppliers because the availability of an array of brands encourages more consumers to buy 1.0 compatible systems in the first instance, which in turn creates more opportunities for JBR and others to sell their portion packs.

85. Moreover, licensed third party brands themselves offer additional competition to Keurig in the sale of portion packs. Nor is there any shortage of brands available: the evidence suggests that new unlicensed brands are continuously entering.⁷¹

86. The experience of Keurig's Vue system further demonstrates the lack of path dependence in this case. The Vue system has enhanced functionality that the Keurig 1.0 system does not have. However, sales of Vue brewers and packs have always been a small share of total Keurig sales, and Keurig has announced that the Vue will be discontinued.⁷² The success of the Keurig Version 1.0 system did not guarantee the success of the Vue system.⁷³ Similarly, unless it provides real value to consumers, 2.0 will not succeed just because 1.0 currently has a significant share of single-serve brewer sales.

⁷¹ Manly Deposition 8/8/2014, 154:25-155:1. By way of example, two Keurig licensed brands include Wolfgang Puck and Emeril. There are other celebrity chefs and restaurants who might lend their names to coffee portion packs. Panera, for instance, offers unlicensed portion packs. (<https://www.panerabread.com/content/dam/panerabread/documents/press/2013/Panera%20Coffee%20Single%20Serve.pdf>, last accessed 8/29/2014).

⁷² KGM00000236.

⁷³ Another real-world example of a product that demonstrated a complete lack of path dependence was New Coke—Coca Cola's attempt to innovate the flavor of Coke. While Coca-Cola had a significant market share with its Coke product, New Coke was a commercial failure. Coca-Cola was subsequently forced to remove New Coke from the market and return to its original formulation, newly dubbed "Coca Cola Classic."

IV. THE INTRODUCTION OF THE KEURIG 2.0 SYSTEM WILL NOT EXCLUDE JBR FROM COMPETING

87. There are two reasons why the introduction of the Keurig 2.0 system will not exclude JBR and other unlicensed suppliers of 1.0 compatible portion packs during the pendency of this litigation, if ever. First, the ink reading technology has not prevented some suppliers of 1.0 compatible portion packs from developing portion packs that can be used with 2.0 brewers. Also, the installed base of Keurig 1.0 brewers and 1.0 compatible brewers will fall slowly. This means that, even if consumers are not able to use JBR's OneCups in Keurig 2.0 brewers, there will be a limited reduction in demand for 1.0 compatible portion packs made by JBR and other suppliers during the pendency of the litigation.

A. [REDACTED]
[REDACTED]

88. JBR claims that the ink-reading technology in Keurig's 2.0 system will prevent its products from being used in the Keurig 2.0 system. This is inconsistent with the claims by some competitors that they have been able to reverse-engineer the ink-reading technology.

89. TreeHouse Foods, for example, announced on August 7, 2014, that it had reverse engineered the ink-reading technology and would be selling portion packs compatible with the 2.0 system by the year end.⁷⁴ In part as a result, TreeHouse dropped its efforts to seek a preliminary injunction regarding the Keurig 2.0 technology.⁷⁵ [REDACTED]

⁷⁴ "TreeHouse Foods Inc. Reports Second Quarter 2014 Results," TreeHouse Press Release, 8/7/2014, (<http://phx.corporate-ir.net/phoenix.zhtml?c=191105&p=irol-newsArticle&ID=1956509&highlight=>, accessed 8/7/2014)

⁷⁵ "Re: In re Keurig Green Mountain Single-Serve Coffee Antitrust Litig., MDL No. 2542" Letter to Judge Broderick from Plaintiff's Attorneys.

[REDACTED]⁷⁶ Mother Parker's also announced that they have developed their own workaround to the ink-reading technology.⁷⁷

90. JBR's claim that it will be excluded during the pendency of the trial, if ever, is contingent on its not having access to a workaround. If the ink-reading technology will have as large a negative effect on JBR's sales as it claims, it would have a strong incentive to either develop its own workaround or acquire technology from a third party. [REDACTED]

[REDACTED]

[REDACTED]

B. The Installed Base of 1.0 Brewers Will Fall Slowly

91. Because the demand for 1.0 compatible packs, including JBR's OneCup products, depends on the installed base of 1.0 compatible brewers, any harm JBR or another 1.0 unlicensed pack supplier may suffer from the introduction of the Keurig 2.0 system would be the result of a reduction in the installed base of 1.0 brewers. During the pendency of this case, that harm will be limited because the large installed base of the 1.0 system will decrease slowly. In addition, the fact that the demand for unlicensed 1.0 compatible packs will remain high indicates that retailers will continue to have an incentive to sell unlicensed packs.

92. One reason why, as a matter of economics, we should expect the large installed base of 1.0 compatible brewers to change slowly is that introduction of the Keurig 2.0 system will not limit the options available to consumers who prefer 1.0 systems. When Keurig introduces the 2.0 system, consumers will still be able to use their existing 1.0 compatible brewers and will be able

⁷⁶ Sarina Deposition 8/26/2014, 244:8-246:12.

⁷⁷ "RealCup Brand Capsules Compatible with Keurig 2.0 Brewers," Newswire, 8/21/14, (<http://www.newswire.ca/en/story/1401452/realcupm-brand-capsules-compatible-with-keurig-2-0-brewers>, accessed 8/26/14).

to buy 1.0 compatible brewers. While sales of unlicensed 1.0 compatible brewers have been relatively small to date, their current share understates their likely competitive significance. [REDACTED]

[REDACTED] Mother Parkers, who supplies coffee systems to the away from home (“AFH”) segment, offers a version 1.0 brewer that is designed to be plumbed into a building’s water system, and they also plan to offer an at-home version of this high-end brewer.⁷⁹ Moreover, Keurig will continue to offer one of its most popular home use 1.0 systems as well as 1.0 systems in the AFH market, at least one of which can be purchased at Staples.⁸⁰ Each of these systems will work with 1.0 and 2.0 K-Cups. If Keurig prices its 2.0 system too high and ceases offering 1.0 brewers, then the alternative 1.0 system will be more attractive and unlicensed 1.0 brewer manufacturers will increase their supply to fill the void left by Keurig. Customers will be more likely to purchase 1.0 compatible systems—and sales of 1.0-compatible systems will expand—if the 2.0 systems (brewers and 2.0 compatible K-Cups) are not priced competitively. [REDACTED]

93. A second reason we should expect the installed base of 1.0 compatible brewers to change slowly is because there will likely be limited replacement by Keurig 1.0 brewer owners with Keurig 2.0 brewers. [REDACTED]

⁷⁸ JBRI00000179 pp. 5-6. See also JBRI00000187.

⁷⁹ “RC400- Open for Business,” RealCup-Business Solutions, (<http://realcup.com/business-solutions/brewer.php>, accessed 8/20/14).

⁸⁰ http://www.staples.com/Keurig-OfficePRO-Single-Cup-Commercial-Coffee-Brewer-Black-Silver/product_853653, accessed 8/28/2014.

⁸² JBRI00000179 and JBRI00000187.

[REDACTED]

94. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

95. In conclusion, economic principles suggest we should not expect to see the installed base of 1.0 brewers fall quickly, [REDACTED]. Therefore, the introduction of the 2.0 brewer will not exclude JBR or other 1.0 unlicensed pack suppliers.

V. EVEN IF JBR LOSES SALES, THE INTRODUCTION OF THE KEURIG 2.0 SYSTEM WILL NOT HARM COMPETITION

96. From an economic perspective, for JBR's claim that Keurig's introduction of the 2.0 brewer will be anticompetitive to be valid, JBR must show that it will be prevented from competing as a result of the introduction of the 2.0 system. In addition, JBR must show that its elimination as a competitor will occur as the result of harm to competition caused by the introduction of the 2.0 system. And JBR must also show that the likely reduction in competition will harm consumers.

⁸³ JBRI00000179 and JBRI00000187.

⁸⁴ JBRI00000179 and JBRI00000187.

⁸⁵ JBRI00000179 and JBRI00000187.

⁸⁶ JBRI00000179 and JBRI00000187.

97. Application of economic principles to the facts of this case indicates that the introduction of the Keurig 2.0 system will not have an anticompetitive effect. As discussed above, the effect of the introduction on JBR's sales during the pendency of the case will be limited. If JBR is unsuccessful in the long run, it will be the result of competition between 2.0 and 1.0 systems, other single-serve brewers, and multi-cup brewing systems. Even if JBR or other competitors were to exit in the long run, Keurig will still face competition from the other alternatives discussed above, so it will not be able to acquire monopoly power. Moreover, the 2.0 system design is procompetitive, so even if JBR and other competitors were forced to exit as a result of the 2.0 system design, consumers will still benefit from the design.

A. Any Possible Exclusion of JBR in the Long Run Will Not Be the Result of a Reduction in Competition

98. JBR will only be prevented from competing for sales of 1.0 compatible packs in the long run if the installed base of 1.0 brewers falls significantly. The installed base will only fall enough to cause JBR or other compatible pack makers to exit if enough consumers view the Keurig 2.0 system as a superior alternative to 1.0 brewers sold by compatible brewer suppliers and Keurig itself.

99. In other words, any potential long-run impact would not be the result of a reduction in competition. Instead, it would be the result of competition between Keurig, sellers of 1.0 compatible brewers, and sellers of numerous other brands of single-cup brewers, and other alternatives.

100. JBR describes the 2.0 system as an “underwhelming innovation.”⁸⁷ If so, then we would expect to see Version 1.0 brewer owners continuing to use their brewers and buyers continuing to purchase 1.0 brewers, and there would be no long run reduction in the ability of JBR or other competitors to compete. The only way that JBR’s sales can be reduced significantly by 2.0 is if enough consumers prefer Keurig’s 2.0 system over the 1.0 system. This would be a competitive outcome.

B. Any Possible Exclusion of JBR in the Long Run Will Not Allow Keurig to Charge Monopoly Prices for K-Cups

101. For the introduction of the Keurig 2.0 system to be anticompetitive, it would have to harm competition by allowing Keurig to charge monopoly prices. As discussed above, the absence of competitors selling aftermarket products in a closed system does not mean the seller of the system can charge monopoly prices for the aftermarket components when there is competition at the system level.

102. To illustrate how the effect of competition from alternative systems affects K-Cup pricing it is helpful to consider, from an economic perspective, how this competition affects the profit maximizing price. If Keurig was only competing against other single-serve systems, its profit maximizing prices for K-Cup would take into consideration how many of its customers would substitute to other single-serve systems in response to a K-Cup price increase. The higher the willingness to substitute, the lower Keurig’s profit maximizing price. Keurig, however, has a substantial incentive to compete for drip customers as well, since they represent 58 percent of total coffee consumers. For Keurig to grow its business, it must price competitively to attract

⁸⁷ JBR, Inc. vs. Keurig Green Mountain, Inc., Complaint 3/13/2014, ¶¶11, 101.

these consumers. The number of customers it could potentially gain from drip coffee exceeds the number of customers who use other single-serve systems, which forces Keurig to compete aggressively for that segment. Again, the more willing customers are to substitute between multi-serve and single-serve systems, the lower the profit maximizing price. As I discuss elsewhere, the evidence indicates that the willingness to substitute between drip and a Keurig system is an important constraint on Keurig's pricing.

103. As I discussed above, the evidence indicates that Keurig faces competition at the system level and does not charge monopoly prices for K-Cups. The introduction of the 2.0 system does not reduce the competition Keurig faces. The Keurig 2.0 system will compete against other single-serve systems as well as multi-serve brewers and retail outlets. In addition, the 2.0 system will also compete against sellers of 1.0 brewers, including Keurig itself, and the installed base of Keurig 1.0 systems. If Keurig does not satisfy consumer demand for 1.0 brewers, then licensed or unlicensed brewer makers are likely to step up their offerings of 1.0 compatible brewers. The introduction of the 2.0 system can actually increase the competition Keurig faces at the system level. Thus, even if JBR were to exit, Keurig will not be able to charge monopoly prices for K-Cups.

104. There are some conditions, discussed above, under which competition at the system level might not be sufficient to constrain a primary product supplier from charging monopoly prices for aftermarket products. If consumers must make a large up-front investment in a primary product, then a seller of primary products that originally offers aftermarket products at competitive prices may have an incentive and ability to exploit the fact that buyers are locked into its system and raise prices on aftermarket products to supracompetitive levels.

Alternatively, if consumers are uninformed about the prices of aftermarket products, then sellers may have an incentive and ability to charge monopoly prices for those products ex post.⁸⁸

105. None of those conditions are present in this case. As noted above, the price of Keurig brewers is low and represents a small share of total system costs, so owners of Keurig brewers are not locked in to the systems. In addition, plaintiffs have provided no evidence that Keurig has raised prices to exploit any alleged lock-in. Keurig pricing for packs is also very transparent. Retailers that sell brewers also sell K-Cups, and the placement of packs is often adjacent to the placement of brewers.⁸⁹ The Keurig website and websites of other sellers advertise prices for K-Cups.⁹⁰ Thus, potential buyers of 2.0 brewers can easily learn about 2.0 K-Cup prices. Keurig has also made it clear that 2.0 brewers will work only with authorized Keurig portion packs. Consumers should, therefore, be able to make informed purchasing decisions knowing that Keurig has designed the 2.0 system as a closed system.

C. The Introduction of the 2.0 Brewer is Procompetitive

106. There are at least three reasons why the design of the 2.0 system is procompetitive and will benefit consumers: 1) it adds functionality that prior systems did not have; 2) it reduces the shared blame problem and increases the value of the entire system; and 3) it allows Keurig to more efficiently meter demand which induces Keurig to sell brewers at lower prices. Moreover,

⁸⁸ Reputational concerns can constrain the incentive of sellers to engage in this form of ex post opportunism. See, for example, Shapiro, Carl. "Aftermarkets and Consumer Welfare: Making Sense of Kodak," 63 *Antitrust Law Journal* (1995): 148–57.

⁸⁹ KGM00000001 at 53, 55, 56, 58. See also "Keurig Single Cup K-Cup Packs in Over 200 Varieties," Keurig (<http://www.keurig.com/shop/k-cups/k-cup-coffee>, accessed 8/20/2014) and "Keurig K-Cups," Amazon (<http://www.amazon.com/s?ie=UTF8&page=1&rh=i%3Aaps%2Ck%3AKeurig%20K-Cups>, accessed 8/20/14).

⁹⁰ <http://www.keurig.com/shop/k-cups/k-cup-coffee>;
<http://www.amazon.com/s?ie=UTF8&page=1&rh=i%3Aaps%2Ck%3AKeurig%20K-Cups>.

market evidence shows that consumers have benefitted from the inter-brand competition from closed single-serve systems.

1. Enhanced Functionality of the 2.0 System

107. The new 2.0 brewer allows consumers to brew an entire carafe of coffee, in addition to just a single cup. Another important advance in the 2.0 system technology is that it combines the simplicity of the K-Cup format with the more sophisticated, customizable Vue Pack format. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

2. The Closed Nature of the 2.0 Systems is Procompetitive

108. As discussed above, the 2.0 system has been designed as a closed system in the sense that the brewer is designed to only work with licensed K-Cups. Also as discussed above, economic principles indicate that a closed system can have many procompetitive benefits. The evidence in this case indicates that the closed nature of Keurig's 2.0 system will benefit consumers in several ways.

⁹¹ Sullivan Deposition 8/7/2014, 36:12-37:19; 119:7-120:15.

⁹² Sullivan Deposition 8/7/2014, 289:6-292:2.

- a. Implementing a closed system allows Keurig to solve the shared blame problem and allows Keurig to increase the value of the entire system

109. If the packs placed into a Keurig brewer are defective, whether they are made by JBR or another unlicensed pack supplier, then the quality of the coffee can be poor. Defective packs can also be an inconvenience to the consumer and can damage the brewer itself.⁹³ However, consumers may not be able to determine whether a problem caused by a defective pack is the fault of the pack or the system itself. As such, in the eyes of the consumer, Keurig shares some of the blame for the defective cup, and this reduces demand for the Keurig system.

110. The shared blame problem also means that third-party pack manufacturers are more likely than Keurig to produce defective packs. A defective pack reduces demand for that pack maker as well as the brewer maker. Thus, when choosing the quality level for its packs, Keurig internalizes the adverse effect of a defective pack on both pack and brewer sales, while a third-party supplier will only consider the effect of a defective pack on the demand for its own packs. As a result, third-party suppliers will have an incentive to produce lower quality packs than Keurig. From an economic perspective, this means that Keurig has an incentive to offer a closed system, and that such a system can provide benefits to consumers.

111. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁹³ Sullivan Deposition 8/7/2014, 142:18-143:19; 213:18-214:3. See also KGM00000105.

⁹⁴ Sullivan Deposition 8/7/2014, 300:18-301:16.

⁹⁵ Sullivan Deposition 8/7/2014, 294:4-298:6.

[REDACTED]

112. The evidence indicates that Keurig has reason to be concerned about quality issues in unlicensed packs impacting the value of the system. For example, a court found that Sturm misled consumers about the contents of its compatible portion packs, which contained instant coffee instead rather than “a high quality coffee bean pulverized into a powder so fine that [it] will dissolve.”⁹⁷

113. One can contrast the incentives of Keurig and other single-serve makers to offer closed systems with those of a seller of drip brewers. The technology is simpler for drip systems, so if a filter is defective, buyers are more likely to be able to determine that the problem was caused by the filter rather than the brewer. Some sellers of drip brewers sell their own filters and recommend that buyers use their filters or other high-quality filters.⁹⁸ However, drip sellers do not have the same incentive to close their systems, and they have not, in fact, designed their systems to only work with their own filters or coffee.

- b. The ability to meter usage efficiently increases output and is therefore procompetitive

114. Another advantage of a closed system is that it allows more effective metering of demand. Recall that metering of demand can expand total output by charging lower total prices to low frequency users. If a system were completely open and a seller of a primary product was

⁹⁶ Sullivan Deposition 8/7/2014, 297:10-298:6.

⁹⁷ Suchanek v. Sturm Foods, Inc., 2014 WL 4116493 (7th Cir. Aug. 22, 2014).

⁹⁸ “The Perfect Cup,” Melitta (<https://www.melitta.com/en/Why-We-Filter-1662,72376.html>, accessed 8/26/14). See also “Fast Brew 12 Cup Coffee Maker Manual”, Melitta p.5.

able to earn less on sales of aftermarket products, then it would have an incentive to charge higher prices for the primary product than if the system were closed. Would-be low frequency users are harmed because they will not purchase the primary product. Because would-be low frequency users no longer purchase the primary product in the absence of metering, total sales are lower. When closed systems allow the expansion of output in this way, they are procompetitive.

115. Keurig has an incentive to close the 2.0 system to induce low frequency users to buy the 2.0 brewer, and doing so benefits low frequency users by allowing them to purchase a product they otherwise would not and/or pay lower prices for the system.

116. Moreover, the ability to charge low brewer prices is important for the launch of the Keurig 2.0 brewer. As discussed above, most of the potential buyers of the Keurig 2.0 brewers are those that did not value the 1.0 single-serve technology sufficiently to purchase it. Keurig's ability to charge low prices for the 2.0 brewers will induce more buyers of drip coffee to experiment with a new system. If, instead, Keurig were forced to open the 2.0 system, it would have an incentive to charge higher brewer prices. This means a group of buyers who would otherwise have purchased a 2.0 brewer will not do so.

c. Market evidence indicates that consumers have benefited from the inter-brand competition resulting from closed single-serve systems

117. As noted above, single-serve systems have generally been closed systems from the time they were first developed. I also discussed above how closed systems can facilitate inter-brand competition more than open systems because closing the systems allows suppliers to better differentiate their systems as well as compete more vigorously to win consumers over to their

platform. Single-serve systems have been taking sales away from open multi-serve systems that are less differentiated. Thus, economic reasoning suggests that consumers have benefited from the fact that single-serve system suppliers have closed their systems. If not, then, we would not have expected to see firms choosing closed single-serve systems and successfully taking away sales from multi-serve systems. This evidence suggests that consumers have benefitted from the enhanced inter-brand competition created by the closed systems.

VI. THE INTRODUCTION OF THE KEURIG 2.0 SYSTEM WILL NOT CAUSE IRREPARABLE HARM TO JBR

118. Any harm JBR could potentially suffer from the introduction of the 2.0 system would only be irreparable harm if it would not be possible to compensate JBR for its losses. From an economic perspective, there are several reasons to conclude that JBR will not suffer irreparable harm. First, JBR's sales are unlikely to fall significantly during the pendency of the litigation. Second, because any sales that JBR may lose will be minimal, JBR will likely not exit the business.

[REDACTED]

[REDACTED]

[REDACTED] As a result, any sales that JBR does lose can easily be compensated through money damages if JBR were successful after a full hearing on the merits.

119. Economics tells us that a profit maximizing firm has an incentive to continue operating a business as long as the revenue it earns exceeds its variable costs, including the costs of leasing the capital equipment needed for its business. Thus, we would not expect to see a firm exiting a business if its net income was positive. Moreover, as long as a firm can cover its variable costs, it

will continue to operate, even if it does so at an overall loss, if it is obligated to pay fixed costs even if it ceases operations, [REDACTED]

120. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] I understand that, based on a more detailed review of JBR's financial statements and other evidence, Dr. S.P. Kothari also concludes that JBR will not exit the business.¹⁰¹

121. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

⁹⁹ Rausser Declaration 8/11/2014, at ¶ 108.

¹⁰⁰ Rausser Declaration 8/11/2014, at ¶ 116.

¹⁰¹ Kothari Declaration, at ¶ 11.

[REDACTED]

122. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

VII.DR. RAUSSER’S OPINIONS ARE NOT SUPPORTED BY THE EVIDENCE HE PRESENTS OR PROPER ECONOMIC ANALYSIS

A. Dr. Rausser’s Claims about Monopoly Power Are Not Based on Economic Analysis or Market Evidence

123. Dr. Rausser claims that single-serve brewers are not close substitutes for other coffee making systems, and from this he concludes that single serve brewers are a separate product market.¹⁰² Dr. Rausser conducts no analysis of the willingness of buyers to substitute between single-server brewing systems and other alternatives. Instead, his claims are based entirely on his discussion of the fact that single-serve brewers have attributes valued by consumers that other alternatives do not have.¹⁰³

124. Economics tells us that a supplier has monopoly power when a large share of its customers do not consider alternative products reasonable substitutes and would not substitute

¹⁰² Rausser Declaration 8/11/2014, at ¶ 47.

¹⁰³ Rausser Declaration 8/11/2014, at ¶¶ 46-47.

away from the suppliers' product if it charged a monopoly price. Thus, a proper economic analysis of whether a supplier has monopoly power requires an evaluation of the evidence on the willingness of its customers to substitute between alternative products. The fact that single-serve systems have different attributes than alternatives does not tell us that consumers would not be willing to substitute between them. For example, consumers can buy home-use printers that print and scan and those that only print. For many buyers, the ability to scan is not very important, and those consumers would consider the two types of printers to be reasonable substitutes for one another. Thus, printers that only print constrain the prices charged by sellers of printers that also scan, even though, according to Dr. Rausser's logic, they would not be substitutes for each other.

125. Indeed, if Dr. Rausser had considered market evidence he would have noted that the growth of Keurig and other single-serve sales has come largely as a result of reductions in sales of other alternatives. (See Exhibit 4.) This is consistent with the data that Dr. Rausser presents in his own Figure 1. This evidence tells us that the growth of Keurig's sales has occurred because a large number of buyers have viewed single-serve systems as reasonably interchangeable substitutes for other alternatives.

126. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹⁰⁴ KGM00006057.

¹⁰⁵ Sullivan Deposition 8/7/2014, 68:18-69:7. KGM00000191.

[REDACTED]

127. Even if Dr. Rausser's market share definition were valid, his claim that Keurig controls 86% of portion pack sales overstates the share of licensed K-Cup sales for which Keurig controls pricing.¹⁰⁷ For example, Starbucks K-Cups are distributed by Starbucks itself to grocery stores, mass retail stores, and club stores.¹⁰⁸ Because Keurig does not set prices for these sales, Keurig's pricing is constrained by the prices charged by Starbucks and others.

128. Dr. Rausser also completely ignores the economic literature, cited above, that demonstrates that high shares in aftermarkets do not equate to monopoly power when the primary market is competitive. Since buyers choose between the Keurig system and other alternatives based on the total cost of brewers plus coffee, competition from other systems constrains the pricing of K-Cups. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Consumers are also not locked in to Keurig systems, because the brewer price is small

¹⁰⁷ Rausser Declaration 8/11/2014, at ¶ 24.

¹⁰⁸ "Starbucks and Green Mountain Coffee Roasters Enter Into Expanded, Long-Term Strategic Partnership," GMCR Press Release, 5/8/2013. See also 2013 Amended and Restated Manufacturing, Sales and Distribution Agreement among Green Mountain Coffee Roasters, Inc., Starbucks Corporation and Keurig, Incorporated, 5/6/2013.

¹⁰⁹ KGM00006057.

¹¹⁰ [REDACTED]

compared to the overall system cost, and pricing of K-Cups is transparent. This is consistent with market evidence, discussed above, that K-Cup pricing is constrained by these alternatives.

129. Nor does the evidence that Dr. Rausser presents support his monopoly power claims. First, Dr. Rausser argues that Keurig's ability to charge a price premium over JBR for 1.0 packs is evidence that it has monopoly power.¹¹¹ This argument is based on flawed economic reasoning. Even in highly competitive markets, similar products can sell at very different prices when the perception of quality differs across brands. For example, there is wide variation in prices of non-Keurig 1.0 compatible pack prices. Known brands such as Gevalia and Maxwell House sell for prices at or above many of the prices for licensed 1.0 K-Cups, and for higher prices than OneCups.¹¹² (See Exhibit 7.) Even licensed Keurig brands sell for very different prices.¹¹³ This means that prices can differ across brands for reasons other than monopoly power, so the fact that Keurig brand K-cups sell for more than OneCups tells us nothing about whether Keurig has monopoly power.

130. If higher prices were an indication of monopoly power, then the results in Exhibit 2 are inconsistent with Dr. Rausser's claims. Keurig's brewer and pack price are generally lower than the prices of several single-serve system competitors.

131. The evidence presented in Dr. Rausser's own report confirms that the poor brand perception of JBR's product explains its lower cost. Dr. Rausser notes that, "at Costco and BJ's Wholesale, OneCup is priced below the cost of the store's own private label alternative which is

¹¹¹ Rausser Declaration 8/11/2014, ¶ 68

¹¹² Keurig and Kraft recently reached a deal to license Gevalia and Maxwell House. <http://www.forbes.com/sites/samanthasharf/2014/08/22/with-licensing-deal-kraft-gives-keurig-a-huge-caffeine-boost/>, accessed 8/27/2014.

¹¹³ Nielsen Retail Sales Data.

manufactured for it by Keurig.”¹¹⁴ [REDACTED]

[REDACTED]¹⁵

132. It is also common in aftermarkets for branded products sold by the seller of the primary product to sell at a premium over third-party products. For example, Apple-branded iPhone accessories typically sell for higher prices than third-party accessories.¹¹⁶ Thus, Keurig’s ability to charge a premium for its 1.0 packs relative to unlicensed packs with lesser known brands is not evidence that it has monopoly power. Dr. Rausser’s claim that Keurig’s high share of 1.0 compatible pack sales is an indication that it has monopoly power is also incorrect. Again, the difference in perceived quality explains the difference in share.

133. Finally Dr. Rausser’s appeal to the *Horizontal Merger Guidelines* in his discussion of market definition is misplaced.¹¹⁷ The methods for assessing market definition in the *Merger Guidelines* are used by the FTC and DOJ to evaluate *changes* in concentration that would result from a proposed merger of two firms. In this case, however, there is no change in firm control or ownership. Rather, the relevant issue in this matter is the level of competition faced by Keurig from all competitors that constrains its pricing of its K-Cups—and whether Keurig has monopoly power. As I discuss elsewhere, Keurig’s 2.0 K-Cup pricing is constrained on multiple fronts.

¹¹⁴ Rausser Declaration 8/11/2014, at ¶ 70.

¹¹⁵ Sarina Deposition 8/26/2014, 203:1-3.

¹¹⁶ For example, the .5 meter Apple lightening cable sells for \$19.00 and the 3 foot lightning cable from Basictech sells for \$3.50 on Amazon. See <http://store.apple.com/us/product/ME291ZM/A/lightning-to-usb-cable>, accessed 8/18/2014; <http://www.amazon.com/Basictec-iPhone-Charger-Cable-Lightning/dp/B00JSY1WOM/ref>, accessed 8/26/2014.

¹¹⁷ Rausser Declaration 8/11/2014, at ¶¶ 54-55.

B. Dr. Rausser's Analysis Does Not Support His Claim that Keurig's Contracts Have Harmed Competition

134. Dr. Rausser claims that Keurig's exclusive contracts with Keurig Authorized Distributors ("KAD") for the AFH segment and its contracts with retailers to be the exclusive supplier of their store brands are anticompetitive (although I understand these issues are not bases on which JBR is seeking a preliminary injunction).¹¹⁸ In order to show that Keurig's contracts harmed competition, Dr. Rausser must show that Keurig's contracts foreclose competition in a substantial share of the markets affected. However, though Dr. Rausser argues that "Keurig has used exclusive distributors bound by 'loyalty provisions' to erect a ring fence around its products that locks out competitors,"¹¹⁹ he provides no supporting economic analysis that the agreements have actually done so. Moreover, his claims are inconsistent with the evidence that JBR and others have been able to expand their sales dramatically despite the allegedly foreclosing contracts. Finally, he ignores the potential procompetitive impact of the contracts.

135. Dr. Rausser has presented no analysis of the amount of sales affected by these contracts individually or collectively. There is, therefore, no basis for his claim that these challenged contracts could even potentially exclude JBR or other unlicensed pack sellers from a large enough share of any relevant market to harm competition. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹¹⁸ Rausser Declaration 8/11/2014, at ¶¶ 73-74.

¹¹⁹ Rausser Declaration 8/11/2014, at ¶ 73.

¹²⁰ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Dr. Rausser also has cited no evidence that JBR could not compete to win exclusive AFH or private label contracts. Moreover, even if JBR did lose competition for some private label business, this does not mean JBR was unable to compete for that business or that retailers did not get the benefits of competition for that business. Dr. Rausser's claim that the challenged contracts have foreclosed JBR is also completely inconsistent with market evidence. [REDACTED]

[REDACTED]

136. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Moreover, other 1.0 compatible brewer suppliers can compete to be the exclusive supplier for AFH distributors, and JBR could sell its OneCups through these brewer suppliers. For example, Mother Parker's, which offers K-Cup compatible brewers for office use, could compete to be the exclusive supplier for an individual AFH distributor. If Mother Parker's won the right to be an exclusive supplier, it could choose to distribute any 1.0 compatible packs from JBR or other suppliers.

137. Dr. Rausser also ignores the procompetitive effects of exclusive contracts that have been identified in the economic literature and makes no effort to determine if these effects offset any alleged anticompetitive effect. Exclusive contracts can benefit buyers because they induce sellers to compete more aggressively.¹²² It is common, for example, for retailers to use exclusive contracts to induce sellers to compete aggressively to be the only private label supplier of a particular product. Exclusive contracts can also lower transaction costs for buyers. A retailer, for example, may prefer to deal with a single supplier for its private label program to lower its transaction costs. Exclusive contracts with distributors can be procompetitive because distributors do not have an incentive to provide an efficient level of promotion for an individual seller's products, which can lead to a free-riding problem. An exclusive contract can reduce the incentive to free ride, inducing distributors to increase promotional efforts.¹²³

138. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹²² Klein, Benjamin, and Kevin M. Murphy. "Exclusive Dealing Intensifies Competition for Distribution," *Antitrust Law Journal* 75 (Nov. 2008): 433-466.

¹²³ Marvel, Howard P. "Exclusive Dealing," *Journal of Law and Economics* 25 (1982).

¹²⁴ [REDACTED]

C. Dr. Rausser's Assertion that Retailers Will Stop Buying JBR's Products Is Inconsistent with Economic Principles

139. Dr. Rausser accepts JBR's assertions that Keurig 2.0 system design is having a "chilling" effect on sales to its customers and that some retailers have refused to buy 1.0 compatible packs because of the same concerns.¹²⁵ Dr. Rausser does no independent economic analysis to corroborate this assertion. In fact, economic principles indicate that retailers will continue to have an incentive to purchase JBR's and other suppliers' 1.0 compatible packs if consumers find those products attractive. [REDACTED]

[REDACTED] Because unlicensed packs sell at a discount to K-Cups, there will continue to be a strong demand for non-Keurig 1.0 compatible packs. This incentive would be even stronger if, as JBR alleges, Keurig was to increase the price of its 2.0 packs above the competitive level. As a result, retailers will have an incentive to meet the demands of their customers, so we should expect them to continue to offer those packs for sale.¹²⁶

140. The possibility of customer confusion is unlikely to prevent retailers from buying JBR's OneCups. JBR can mark its own packaging to indicate that its product is compatible with the Keurig 1.0 brewers but not Keurig 2.0 brewers. [REDACTED]

¹²⁵ Rausser Declaration 8/11/2014, at ¶¶ 98-99.

¹²⁶ Even if Dr. Rausser's claim that some brick and mortar retailers will not sell OneCups because of the Keurig 2.0 system design, online retailers, such as Amazon, should continue to be willing to sell JBR's products. [REDACTED]

141. Moreover, retailers frequently sell complementary products that work with some systems but not others. For example, games designed for the newer Xbox One do not work with older Xbox 360 consoles.¹²⁸ However, the installed base of Xbox 360 consoles greatly exceeds the installed base of Xbox One consoles. Retailers such as Best Buy continue to sell games for both consoles,¹²⁹ even though it is possible that an Xbox One console owner could mistakenly buy a game that does not work with his or her console. Similarly, iPhone 4 cases do not work with the iPhone 5, but Verizon, AT&T, and Sprint sell both.¹³⁰

D. Dr. Rausser's Analysis Does Not Support His Claims about Irreparable Harm

142. Dr. Rausser opines that the impact of the introduction of the 2.0 system could be the complete loss of JBR's OneCup business.¹³¹ This claim is pure conjecture. Dr. Rausser conducts no analysis to determine how much JBR's sales will decrease or how much their profits will decline. As I discussed above, an analysis of the evidence regarding whether JBR will exit the OneCup business indicates that it is unlikely to exit during the pendency of the litigation. Any harm they may suffer from the challenged conduct will simply be lost profits on lost sales.

¹²⁷ Rogers Declaration 8/11/2014, at ¶ 38 and Exhibit 6 (emphasis in original).

¹²⁸ <http://support.xbox.com/en-US/xbox-one/system/compatibility-with-xbox-360>, accessed 8/21/2014.

¹²⁹ <http://www.bestbuy.com/site/Video-Games/Xbox-One/pcmcat303600050005.c?id=pcmcat303600050005> (accessed 8/20/2014); <http://www.bestbuy.com/site/xbox-360/xbox-360-video-games/abcat0701002.c?id=abcat0701002> (accessed 8/20/2014).

¹³⁰ <http://www.verizonwireless.com/accessories/cases-and-protection/> (accessed 8/20/2014); <http://www.att.com/shop/wireless/accessories/cases.html> (accessed 8/20/2014); http://shop.sprint.com/mysprint/shop/accessory/ao_accessorywall.jsp?accCatId=acc9003cat (accessed 8/20/2014); http://shop.sprint.com/mysprint/shop/accessory/ao_accessorywall.jsp?accCatId=acc9003cat&deviceId=885909727896 (accessed 8/20/2014).

¹³¹ Rausser Declaration 8/11/2014, at ¶ 107

143. Dr. Rausser's other vague conjectures about why JBR will suffer irreparable harm are similarly unsupported by any evidence or analysis. [REDACTED]

[REDACTED].¹³² He also provides no evidence that goodwill is particularly important to JBR or any reason why JBR cannot be compensated for any loss of goodwill that it might suffer. Similarly, he claims that the challenged conduct will cause JBR to lose its early-mover advantage.¹³³ He provides no evidence that JBR has an early-mover advantage, no explanation for why it will suffer a loss of that advantage, or any reason why the loss of that advantage amounts to harm for which JBR cannot be compensated.

144. Importantly, at no point does Dr. Rausser opine that it would be impossible to calculate the damages JBR would allegedly suffer from the challenged conduct. Instead, he only asserts that it would be difficult to do so.¹³⁴ In my experience, calculation of damages is often difficult, but economists have developed well established methods for calculating damages in difficult cases, and I see no reason why those methods cannot be applied to this case. That means that any damages are fully compensable with a money damages award and are not irreparable.

E. Dr. Rausser's Analysis of the Balance of Hardships is Not Based on Sound Economics

145. Dr. Rausser opines that the balance of hardships should "be viewed in the context of the relative sizes of the two companies."¹³⁵ As a matter of economics, it makes no sense to assess relative hardship using company size. If so, preliminary injunctions would always be granted

¹³³ Rausser Declaration 8/11/2014, at ¶ 110.

¹³⁴ Rausser Declaration 8/11/2014, at ¶ 106.

¹³⁵ Rausser Declaration 8/11/2014, at ¶ 116.

when sought by small companies suing large ones, even when a large company would suffer losses from a preliminary injunction that are much larger than the losses a small company would suffer if a preliminary injunction were not granted. Such a rule would be extremely inefficient. Economics suggests that a more efficient standard for assessing the balance of hardships is to look at the relative size of the losses for each company as well as the ability of the two companies to compensate each other for those losses.

146. As discussed in detail above, any effect of failing to grant a preliminary injunction on JBR will be limited during the pendency of the litigation, and it would be possible to calculate any lost profits they suffer on lost sales. In addition, Keurig's size means that it can compensate JBR if the court ultimately finds the challenged conduct to be unlawful.

147. Keurig's losses from a preliminary injunction will potentially be very large. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

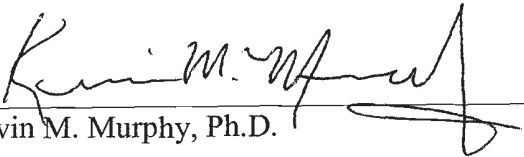
[REDACTED] JBR likely would not be able to

compensate Keurig for the losses it would suffer if a preliminary injunction is granted but the court later finds that the challenged conduct is lawful.

¹³⁶ Sullivan Deposition 8/22/2014, 451:23-452:16. KGM00000829.

¹³⁷ Kothari Declaration, at ¶25.

I declare under penalty of the perjury laws of the United States that the foregoing is true and correct. Executed on August 29, 2014.


Kevin M. Murphy, Ph.D.

Appendix A

Curriculum Vitae

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Current Positions

July 2005-Present: George J. Stigler Distinguished Service Professor of Economics,
Department of Economics and Booth School of Business, The University of Chicago

Faculty Research Associate, National Bureau of Economic Research

Co-Chair Becker Friedman Institute for Research in Economics, The University of
Chicago

Education

University of California, Los Angeles, A.B., Economics, 1981

The University of Chicago, Ph.D., 1986

Thesis Topic: *Specialization and Human Capital*

Previous Research and Academic Positions

2002-2005: George J. Stigler Professor of Economics, Department of Economics and
Booth School of Business, The University of Chicago

1993 – 2002: George Pratt Shultz Professor of Business Economics and Industrial
Relations, The University of Chicago

1989 – 1993: Professor of Business Economics and Industrial Relations, The University
of Chicago

1988 – 1989: Associate Professor of Business Economics and Industrial Relations, The University of Chicago

1986 – 1988: Assistant Professor of Business Economics and Industrial Relations, The University of Chicago

1983 – 1986: Lecturer, Booth School of Business, The University of Chicago

1982 – 1983: Teaching Associate, Department of Economics, The University of Chicago

1979 – 1981: Research Assistant, Unicon Research Corporation, Santa Monica, California

Honors and Awards

2008: John von Neumann Lecture Award, Rajk College, Corvinus University, Budapest

2007: Kenneth J. Arrow Award (with Robert H. Topel)

October 2005: Garfield Research Prize (with Robert H. Topel)

September 2005: MacArthur Foundation Fellow

1998: Elected to the American Academy of Arts & Sciences

1997: John Bates Clark Medalist

1993: Fellow of The Econometric Society

1989 – 1991: Sloan Foundation Fellowship, The University of Chicago

1983 – 1984: Earhart Foundation Fellowship, The University of Chicago

1981 – 1983: Fellowship, Friedman Fund, The University of Chicago

1980 – 1981: Phi Beta Kappa, University of California, Los Angeles

1980 – 1981: Earhart Foundation Fellowship, University of California, Los Angeles

1979 – 1981: Department Scholar, Department of Economics, University of California, Los Angeles

Publications

Books

Social Economics: Market Behavior in a Social Environment with Gary S. Becker, Cambridge, MA: Harvard University Press (2000).

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Expert Report of Kevin M. Murphy, October 10, 2012, in the Matter of Avery Dennison Corporation v. 3M Innovative Properties and 3M Company, The United States District Court for the District of Minnesota.

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Appendix B

Materials Considered

Court Documents
Declaration of S.P. Kothari, Ph.D. 8/29/2014
Deposition of David Manly & Associated Exhibits 8/22/2014
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